# CORRESPONDENCE

### The Problem of Maternal Mortality

To the Editor, Eugenics Review

SIR,—The article entitled "The Problem of Maternal Mortality" in your January issue (page 273) is so startlingly provocative, both as regards the statements made and the conclusions drawn from them, that I have no doubt that it will evoke replies from abler pens than mine; I find it impossible, however, not to attempt to answer some of the challenges thrown down.

The most palpably incorrect statement appears to be that " medical services and obstetric advances cannot and do not help" in the reduction of maternal mortality. A large body of carefully checked evidence exists to refute this statement, and it is surprising that Mr. Pitt-Rivers should not have been aware of it. I refer to the published records of the principal maternity hospitals, and of the maternity wards of the leading general hospitals, which in the London area show a rate well below the rate of the country as a whole, in spite of the fact that the abnormal cases from the surrounding districts are delivered in these hospitals. In the table published on page 263 of the Annual Report of the Chief Medical Officer of Health for the year 1933, the ten years' average death-rate of six large London hospitals, in 109,575 cases, is shown to have been 1.2 per thousand births. In the East End Maternity Hospital 1,529, and in the British Hospital for Mothers and Babies, Woolwich, 725 women were delivered in 1933 without a single maternal death. In the General Lying-in Hospital only one death took place in 1,065 deliveries. Similar figures are maintained by hospitals in several other areas, for example Leicester and

It is not merely by means of good hospital accommodation that the maternal death-rate can be kept down. The record of r·9 deaths per thousand births maintained by the nurse-midwives trained by the Queen's Institute of District Nursing in over 600,000 cases in all parts of the country is referred to by Sir George Newman in the same table. In his report it is made amply clear that maternal mortality is a local and not a national problem. The rates in cities such as London (3·55) and Liverpool (3·41) do not rise, but the figure for the country as a whole is swelled by the high rates in certain areas, especially in Lancashire, parts of Yorkshire and Wales.

The figures for the county of Glamorgan provide an example of the way in which the rising maternal death-rates of these areas, in which financial and other difficulties have retarded the development of adequate and up-to-date midwifery services, cancel out the reduction in the national figures which is earned by the good districts. In this county, hospital provision for midwifery cases is only about 3 per cent., as against an average of 20 per cent. in other parts of the country,\* and such accommodation as exists is unsuitable and out of date. Until recently the services of a specialist in difficult cases were only available in 7 out of 24 districts, and medical aid was summoned by the midwives in only about 20 per cent. of their cases, the average figure for other areas being 36 per cent., according to the annual reports of the Medical Officers of Health. The midwives themselves are seriously under-paid, the average gross earnings in the industrial districts being only about £50 per annum. In these circumstances it is perhaps not surprising that the rise in puerperal mortality per thousand live births from 1924 to 1933 should be as great as 36 per cent., i.e. from 5.04 to 6.86. The remedies for the situation are, however, not far to seek, as is proved by the successful efforts to combat the high maternal death-rate in Rochdale (Lancashire), an account of which appeared in the British Medical Journal of February 16th last. The rate was reduced from 8.9 in the period 1929-31 to 2.99 in the period 1932-4 by concentrated efforts on the part of all concerned.

The demographic system of investigation and the use of correlations seem to represent misleading methods of approach in such a complex matter as maternal mortality. The variations in the quality of the midwifery services provided in the different areas are not apparent in a mere quantitative survey, but are of great importance. Skilled care is a very different thing from ill-advised obstetrical interference, with which Mr. Pitt-Rivers appears to confuse it. When such large-scale figures as those quoted in the article are relied upon to suggest a remedy, even the quantitative evidence becomes misleading. The tables of maternal and infant mortality in the Ministry of Health's publications entitled High Maternal Mortality in Certain Areas provide an example of this. Out of thirtyeight districts in which the returns over periods of years are analysed, in only eight does there appear to be any support for Mr. Pitt-Rivers's claim that high maternal mortality accompanies a low infant death-rate and vice versa. In thirteen cases no correlation is evident, while in the remaining seventeen the results are strikingly opposed to his theory. For example:

#### HIGH RATES IN BOTH CASES

				Maternal Death-rate	Infant Death-rate
Barnsley	•••			6.05	121.0
Wigan	•••	•••		6.44	108.71
Oldham Preston	•••	•••	• • •	$6 \cdot 79$	103 · 85
	•••	•••	• • •	5.78	103.28

<sup>\*</sup> See High Maternal Mortalities in Certain Areas, pages 78 and 93.

#### Low RATES IN BOTH CASES

	Maternal	Infant Mortality 64·28
	Mortality	
Southport	 2.60	
Barrow-in-Furness	 3 · 58	72.42

It thus appears that the careful investigation of the actual causes of the high maternal death-rates in certain districts which is now being undertaken by the Ministry of Health is likely to be more effective in producing a reduction of these rates than the astonishing remedy which Mr. Pitt-Rivers seems to suggest—namely, the reversion to obsolete methods of infant care, with a view to the reintroduction of the high infant death-rates of former years, which his statistical inquiries have apparently led him to consider desirable.

Apart from any humanitarian considerations, there seem to be fundamental errors both in the calculations made in the article and in the conclusions which are derived from them. Supposing that the biological function of a woman is not to produce children who will die, but essentially to produce children who will survive sufficiently long to reach maturity and so reproduce in their turn, it is necessary, in order to obtain a true picture of the vital cost of child-bearing in any community, to add to the official maternal death-rates per thousand births the mortality incurred in bearing those children who do not survive. This adjustment materially affects the supposedly good maternal death-rates of such countries as Chile, quoted by Mr. Pitt-Rivers as having the lowest white maternal and the highest white infant death-rate in the world, and would in this case increase them by over 30 per cent.

Even if the unwarrantable assertion that maternal and infant death-rates are correlated could be upheld, there are not, I imagine, many people who would agree that it is better to sacrifice 241\* children's lives than that of one or at most two mothers; nor that such sacrifice leads in itself to any improvement in the mental and physical standards of a race.

Nothing but sheer perversity seems capable of supporting an argument to the effect that the constitutional quality and innate capacities of the mothers of England and Wales are below the standards of those of the women of Chile, or, to carry the point to its logical conclusion, to those of the lower-class Chinese, or the Bagoda people, among whom the infant death-rates are said to amount to over 50 per cent.†

London, S.W.1.

\* This figure is derived by subtracting the English infant death-rate of 74 quoted in the article from that given for Chile in 1906-10, i.e. 315. The present English infant death-rate is only 64.

JULIET WILLIAMS.

† Pell, C. E., The Law of Births and Deaths, pages 114-5.

To the Editor, Eugenics Review

SIR,—Mr. Pitt-Rivers in his article under the above heading omits reference to the stockbreeder, although I admit that he mentions the biologist in his list of scientists who should be consulted. Like our late benefactor, Mr. Twitchen, I have been led towards eugenics partly through farming sheep under conditions more nearly approaching to primitive than those obtaining in the more fertile and agricultural parts of England. If such a sheep farmer were told that in future he would have to arrange that no ewe should produce her first lamb until very much later in life than hitherto, he would, I think, reply that a much increased maternal mortality must ensue. If in addition he were told that in future his breeding ewes, both before and after sexual intercourse, must be stall-fed instead of being forced as hitherto to work regularly and physically and out of doors in hunting for a living, he would, I think, reply that this must still further increase the maternal mortality rate. And if it were pointed out to him that stall-feeding would simplify the regular attendance of a "vet," he would, I am afraid, say "Thank you for nothing"—if not worse!

GUY PORTER.

Jersey, C.I.

To the Editor, Eugenics Review

SIR,—In view of the very interesting article by Captain George Pitt-Rivers in the current issue of the Eugenics Review (January, 1935, page 273) and of the widespread notice which is being taken in the problem of maternal mortality, and the extremely various causes which have been assigned for the fact that it has not decreased in spite of all the efforts of local authorities and maternity welfare centres, would it not be a good plan to hold a conference (either public or private) at which the matter could be considered in all its aspects?

URSULA GRANT DUFF.

London, S.W.3.

## Sterility and Eugenics

To the Editor, Eugenics Review

SIR,—I must object to Mr. Kenneth Walker's statement (January, 1935, page 294) that Human Sterility by S. R. Meaker has little direct bearing on eugenics. In strict logic and statistics it is true that sterility is probably less in the upper classes than in the lower, when age of marriage is taken into account. That is, a longshoreman or charwoman married first at 30, after years of hard work and slum surroundings, is more likely to have become debilitated or venereally diseased than a curate or a school teacher of like age.

But as long as the lower classes habitually marry